

Title (en)
Expansion valve

Title (de)
Entspannungsventil

Title (fr)
Vanne de détente

Publication
EP 1382920 B1 20090527 (EN)

Application
EP 03013781 A 20030618

Priority
JP 2002208217 A 20020717

Abstract (en)
[origin: EP1382920A2] An evaporator 10 of an air conditioner comprises a refrigerant entrance port 12 and a refrigerant exit port 14. A division wall 16 of the evaporator is extended to form a housing 200. The housing 200 comprises an inlet 210 for the refrigerant traveling from a compressor, an outlet 220 communicating with the entrance port 12 of the evaporator, and a refrigerant path 230 returning from the evaporator. The cassette unit 100 comprises a pipe member 110, a flange member 120 and a lid member 130, with major components of the expansion valve such as a diaphragm and a driving member for driving a valve means assembled thereto. The cassette unit 100 is accommodated in a hole 240 with steps of the housing 200 to complete the expansion valve. <IMAGE>

IPC 8 full level
F16K 27/00 (2006.01); **F25B 41/06** (2006.01); **B60H 1/32** (2006.01); **F16K 27/02** (2006.01); **F16K 31/68** (2006.01); **F25B 39/02** (2006.01); **F25B 41/04** (2006.01)

CPC (source: EP KR US)
F16K 27/0236 (2013.01 - EP KR US); **F25B 39/02** (2013.01 - KR); **F25B 41/335** (2021.01 - EP KR US); **F25B 39/02** (2013.01 - EP US); **F25B 2341/0683** (2013.01 - EP KR US); **F25B 2500/18** (2013.01 - EP KR US)

Cited by
CN103712383A; CN104296422A; US10066878B2

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1382920 A2 20040121; **EP 1382920 A3 20040421**; **EP 1382920 B1 20090527**; DE 60327728 D1 20090709; JP 2004053060 A 20040219; KR 20040008075 A 20040128; US 2004011078 A1 20040122; US 6942160 B2 20050913

DOCDB simple family (application)
EP 03013781 A 20030618; DE 60327728 T 20030618; JP 2002208217 A 20020717; KR 20030042214 A 20030626; US 60070203 A 20030623